

Ten Week Brood Observations 2003

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Abstract

Ten week brood observations are used as an index to productivity. For ruffed grouse, pheasant, and wild turkey, the number of broods counted per observer in 2003 increased from 2002 levels. However, gray partridge broods counted per observer in 2003 decreased from 2002 levels. Participation by observer in the 2003 Ten Week Brood Survey, decreased 2% from the 2002 level.

Methods

An e-mail containing an electronic survey form was sent to all department field personnel. Field personnel were asked to record the number of ruffed grouse, pheasant, gray partridge, and wild turkey broods observed while doing normal field operations. The survey period began the second week in June and ended the third week of August, 2003. When one of the four species was observed with a brood, participants recorded the date, county of the observation, number of young in the brood, and whether all the young in the brood were counted. A summary form was e-mailed at the end of August to all field personnel. On the summary form, participants reported all brood observations, the percent of their time spent in the field, and whether they or others that worked for them collected the observations. These forms were returned to Wildlife Surveys and the data were entered into the DNR UNIX production server and summarized using the Statistical Analysis System (SAS).

Results

Two hundred and sixty one (261) observers sent back 210 surveys, reporting their observations of game broods of ruffed grouse, pheasant, gray partridge, and wild turkey in the summer of 2003. The number of observers declined from 2002 to 2003 by 2%, and the number of surveys returned by these observers decreased by 2% from 2002 as well.

Ruffed Grouse

The average number of ruffed grouse broods observed during the ten week period per field participant in 2003 was 0.93 (Fig. 1). Broods per observer increased 27% from 2002 when 0.73 broods per observer were recorded. This is the second year since 2001 that the number of ruffed grouse broods observed increased. The average number of broods observed was below the long-term (1970-2002) mean of 1.43 broods per observer. The number of young observed per brood in 2003 was 4.5 compared to 5.9 in 2002, a decrease of 23.7%.

Pheasant

Pheasant observations in 2003 increased to 0.53 broods per observer (Fig. 2). Broods per observer showed an increase of 20% from 2002 when 0.44 broods per observer were recorded. The average number of broods per observer was just above the long-term (1970 - 2002) mean of 0.49. In 2003, average brood size observed was 5.4 compared to 4.7 in 2002, representing an increase of 14.9%.

Gray Partridge

Gray partridge observations in 2003 decreased to 0.01 broods per observer (Fig 3). A total of only three gray partridge broods were observed over the ten-week period. The average number of broods observed was below the long-term (1980 - 2002) mean of 0.03. Average 2003 brood size was 3.0 compared to 10.8 in 2002, representing a 72.2% decline, although sample size is small.

Wild Turkey

In 2003, the number of wild turkey broods per observer was 2.78 (Fig 4). Broods per observer increased 22% from 2002 and was well above the long-term (1987-2001) mean of 1.09 broods per observer. The average 2003 brood size was 4.9 compared to 5.3 in 2002, a decrease of 7.5%.

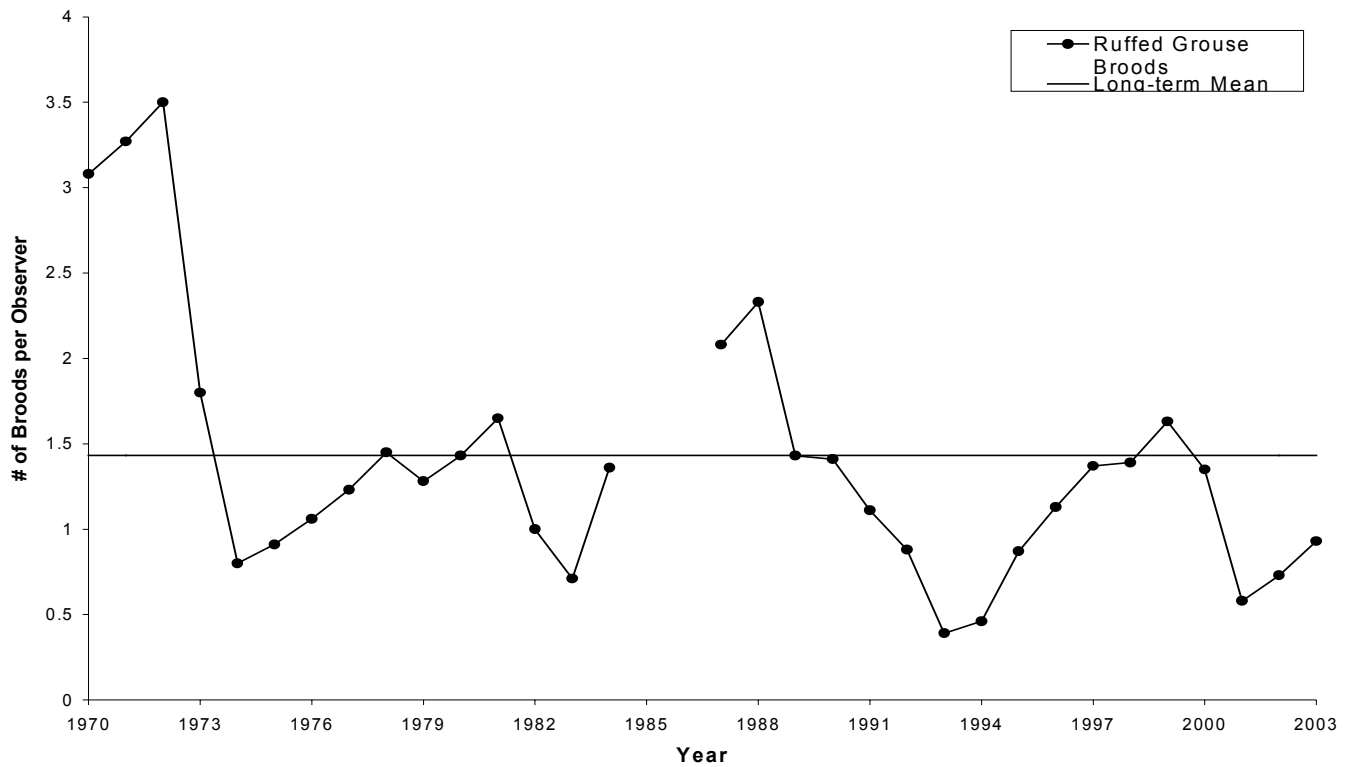


Figure1. *Number of ruffed grouse broods seen per observer 1970-2003.*

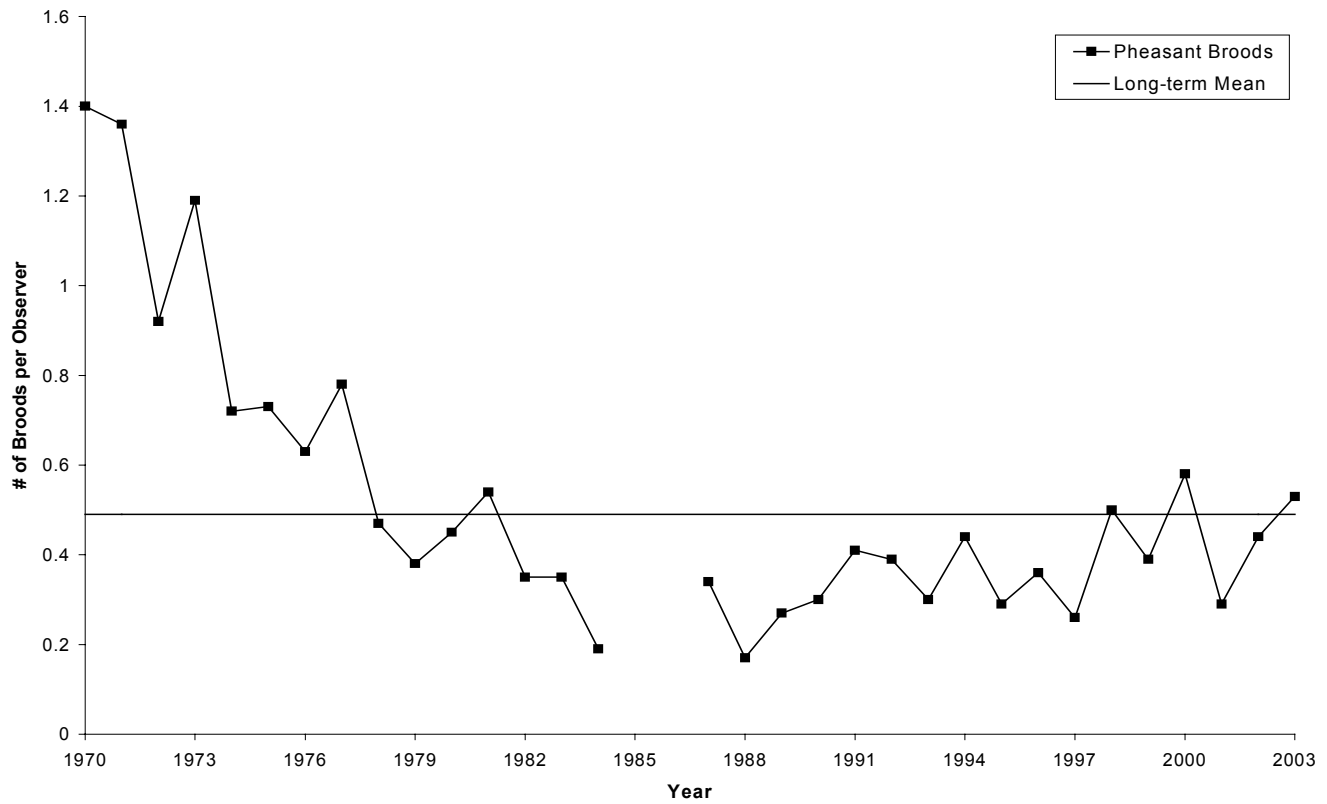


Figure 2. *Number of pheasant broods seen per observer 1970-2003.*

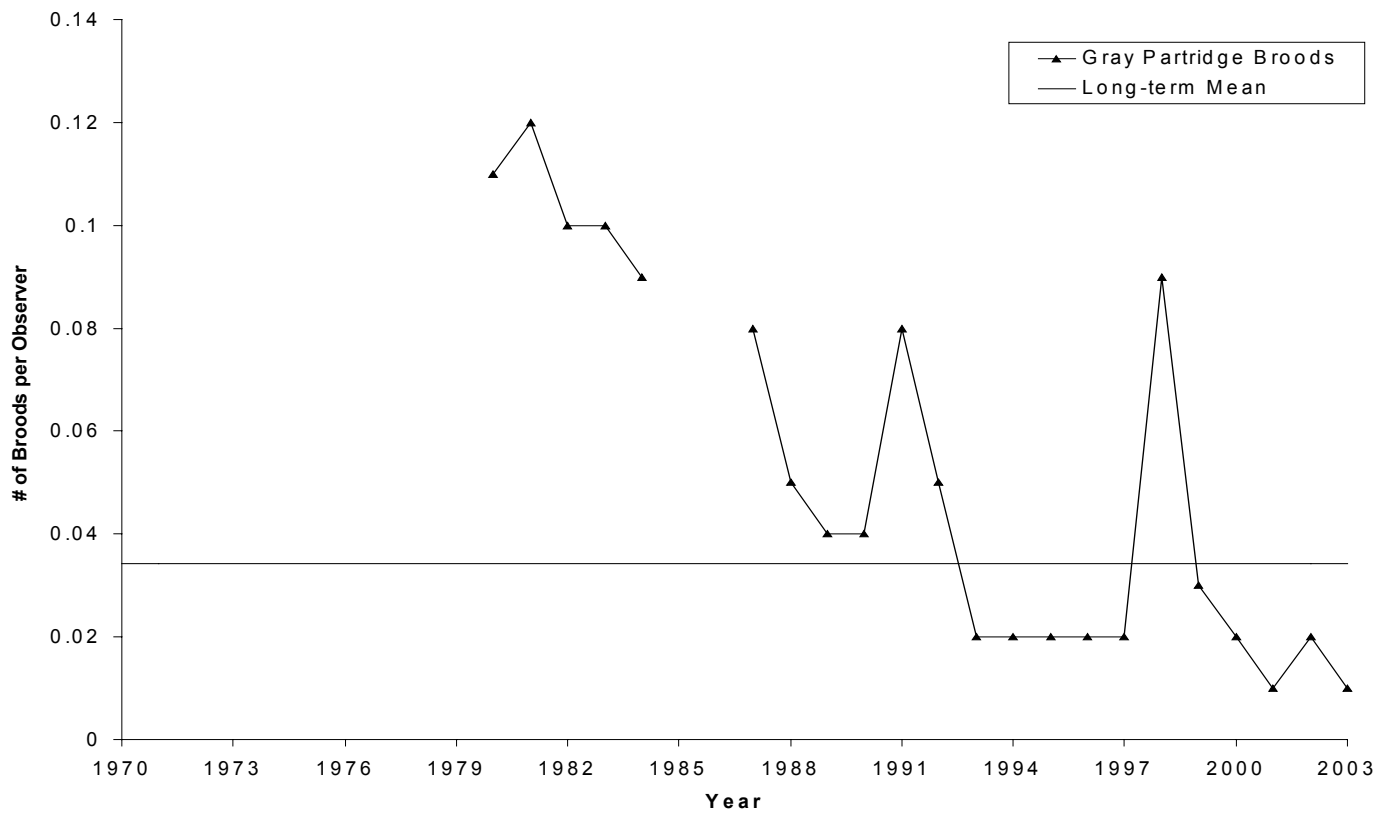


Figure 3. Number of gray partridge broods per observer 1980-2003.

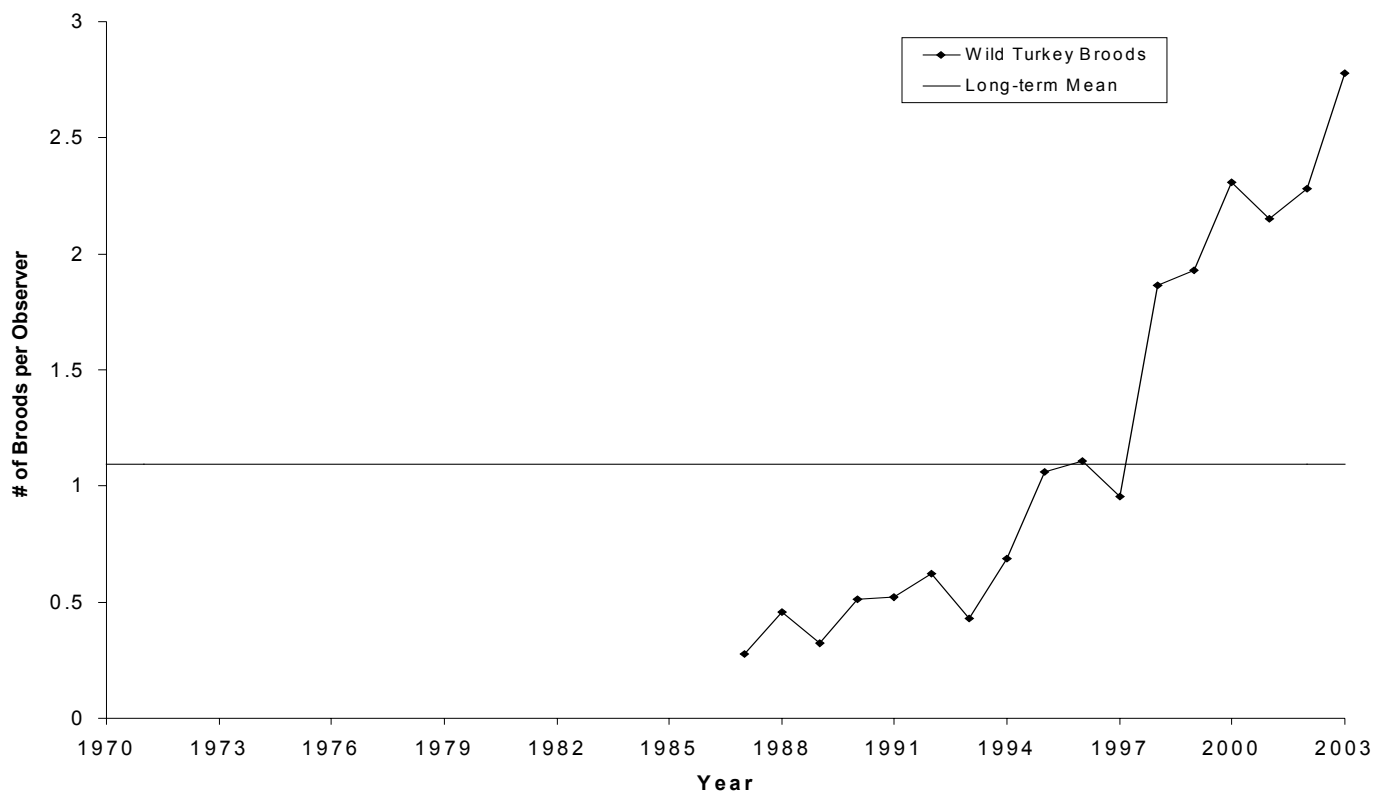


Figure 4. Number of wild turkey broods seen per observer 1987-2003.